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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/556,567	04/24/2000	Louis J. Giliberto	204843	7174

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EXAMINER

NEURAUTER, GEORGE C

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 12/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/556,567	GILIBERTO ET AL.	
	Examiner	Art Unit	
	George C. Neurauter, Jr.	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>06142004</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Claims 2-9 are pending and have been examined.

Response to Arguments

Applicant's arguments with respect to claims 2-9 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 2-4 and 7-9 are rejected under 35 U.S.C. 102(a) as being anticipated by "Architectural Overview of Intel's Bluetooth Software Stack" ("Overview").

Regarding claim 2, "Overview" discloses, for use in a computer, a method of automatically exposing a remote device to an application through sockets via RFCOMM, the method comprising the steps of:

detecting a new connection to the remote device; (page 7, bottom of left column, specifically "An inquiry process results in the discovery of the device...")

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determining whether or not the remote device is a dial-up networking device; and in response to determining that the remote device is not a dial-up networking device, allowing the application access to the remote device through an interface to a transport layer of the computer. (page 5, right column, specifically "The RFCOMM driver is responsible for implementing multiple communication ports...These virtual communication ports are used to support both legacy communication port and IrOBEX-based application for Bluetooth technology. The latter category includes file transfer and synchronization...In addition, PPP over L2CAP is the basis for dial-up networking...[this] can also be supported by the RFCOMM driver set mentioned above..."; page 7, right column, specifically "Once the PC discovers that the other device supports file transfer, the user on the PC can initiate file transfers to the other device...Once RFCOMM channels have been established, the two applications use the IrOBEX protocol to exchange files...")

Regarding claim 3, "Overview" discloses a method of automatically routing an RFCOMM connection to an appropriate device type comprising the steps of:

detecting a new device for connection; determining whether or not the new device is a dial-up networking device; (page 7,

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bottom of left column, specifically "An inquiry process results in the discovery of the device...")

and in response to determining whether or not the new device is a dial-up networking device, enumerating a physical device object associated with the new device if the new device is a dial-up networking device (page 2, left column, specifically "When a Bluetooth device comes in range of a notebook computer, this support enables the applications that are already in the OS (such as dial-up networking and direct cable connect) to be able to work with the new device."; page 4, left column, specifically "The responsibility of enumerating devices that are in range of the Bluetooth bus rests with an *RF Bus Driver* (RFBD)."; page 5, right column, specifically "The RFCOMM driver is responsible for implementing multiple communication ports...These virtual communication ports are used to support both legacy communication port and IrOBEX-based application for Bluetooth technology. The latter category includes file transfer and synchronization...In addition, PPP over L2CAP is the basis for dial-up networking...[this] can also be supported by the RFCOMM driver set mentioned above...") and

exposing the device to an application by way of a transport driver interface if the device is not a dial-up networking device. (page 5, right column, specifically "The RFCOMM driver

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is responsible for implementing multiple communication ports...These virtual communication ports are used to support both legacy communication port and IrOBEX-based application for Bluetooth technology. The latter category includes file transfer and synchronization...In addition, PPP over L2CAP is the basis for dial-up networking...[this] can also be supported by the RFCOMM driver set mentioned above..."; page 7, right column, specifically "Once the PC discovers that the other device supports file transfer, the user on the PC can initiate file transfers to the other device...Once RFCOMM channels have been established, the two applications use the IrOBEX protocol to exchange files..."

Regarding claim 4, "Overview" discloses a method of using a BLUETOOTH-aware transport helper module ("win32 communication API for accessing Bluetooth serial ports") for connecting a legacy application lacking any BLUETOOTH-specific functions to a remote BLUETOOTH device in a manner that is transparent to the application, wherein the application is hosted on a first computer and wherein the first computer also hosts a BLUETOOTH communications stack, and wherein the remote BLUETOOTH device is connectable to the first computer via a BLUETOOTH radio link, the method comprising:

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automatically detecting at the transport service module on the first computer the presence of the remote BLUETOOTH device; (page 7, bottom of left column, specifically "An inquiry process results in the discovery of the device...")

determining automatically at the transport service module whether the remote BLUETOOTH device is a dial-up network device; and in response to determining whether the remote BLUETOOTH device is a dial-up network device, automatically assigning at the transport service module an interface to the remote BLUETOOTH device, wherein the interface allows the application to utilize at least a portion of the BLUETOOTH communications stack to communicate with the remote BLUETOOTH device, wherein if it is determined that the remote BLUETOOTH device is a dial-up network device, the interface appears to the application as a standard modem interface. (page 2, left column, specifically "When a Bluetooth device comes in range of a notebook computer, this support enables the applications that are already in the OS (such as dial-up networking and direct cable connect) to be able to work with the new device."; page 4, left column, specifically "The responsibility of enumerating devices that are in range of the Bluetooth bus rests with an *RF Bus Driver* (RFBD)."; page 5, right column, specifically "The RFCOMM driver is responsible for implementing multiple communication ports...These virtual

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communication ports are used to support both legacy communication port and IrOBEX-based application for Bluetooth technology. The latter category includes file transfer and synchronization...In addition, PPP over L2CAP is the basis for dial-up networking and PPP-based LAN access points. These can also be supported by the RFCOMM driver set mentioned above..."

Regarding claim 7, "Overview" discloses the method according to claim 4, wherein automatically assigning at the transport service module an interface to the remote BLUETOOTH device further comprises assigning a socket to the remote BLUETOOTH device for communications between the application and the remote BLUETOOTH device. (page 5, right column, specifically "The RFCOMM driver is responsible for implementing multiple virtual communication ports over RFCOMM connection with each device supporting the protocol. These virtual communication ports are used to support both legacy communication port and IrOBEX applications for Bluetooth technology.")

Regarding claim 8, "Overview" discloses the method according to claim 7, wherein the interface allows the application to treat the remote BLUETOOTH device as a standard network interface card. (page 5, right column, specifically "The RFCOMM driver is responsible for implementing multiple communication ports...These virtual communication ports are used

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to support both legacy communication port and IrOBEX-based application for Bluetooth technology. The latter category includes file transfer and synchronization...In addition, PPP over L2CAP is the basis for dial-up networking and PPP-based LAN access points. These can also be supported by the RFCOMM driver set mentioned above..."

Regarding claim 9, "Overview" discloses the method according to claim 4, wherein the remote BLUETOOTH device is a dialup networking device associated with a second computer, the method further comprising using the interface assigned to the remote BLUETOOTH device to execute peer-to-peer communications between the first and second computers. (page 2, left column, specifically, "Access points enable access to the Internet, e-mail, and fax for these types of wireless connections for a notebook computer with Bluetooth: a) to a PTSN plug, b) to a cellular phone, and c) to a LAN access point)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the

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art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Overview" in view of US Patent 6 041 075 A to Caushik.

Regarding claim 5, "Overview" discloses the method according to claim 4.

"Overview" does not expressly disclose wherein the interface assigned to the remote BLUETOOTH device comprises a UNIMODEM interface, however, "Overview" does disclose that an interface that operates with the disclosed method may comprise any interface (page 2, right column, specifically the paragraph "Support for third-party development")

Caushik discloses that the UNIMODEM interface provides an abstracted interface to applications to permit communications via telephone lines (column 1, line 10-42).

It would have been obvious to one skilled in the art at the time the invention was made to use a UNIMODEM interface as described in Caushik to appear as a standard modem interface as disclosed in "Overview". Given the specific advantages described above in Caushik and wherein both references are directed to interfaces wherein "Overview" specifically discloses that an interface such as the one disclosed in Caushik may be used with the method disclosed in "Overview", one of ordinary skill in the

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art would have appreciated the advantages disclosed in Caushik and considered both references to be analogous to one another.

Regarding claim 6, "Overview" discloses the method according to claim 4.

"Overview" does not expressly disclose wherein the interface assigned to the remote BLUETOOTH device comprises a Telephony API, however, "Overview" does disclose that an API that operates with the disclosed method may comprise any API (page 2, right column, specifically the paragraph "Support for third-party development")

Caushik discloses that the Telephony API provides an abstracted interface to applications to permit communications via telephone lines (column 1, line 10-42).

Claim 6 is rejected since the motivations regarding the obviousness of claim 5 also apply to claim 6.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 6 255 800 to Bork.

Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 14 June 2004 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS**

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MADE FINAL. See MPEP § 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to George C. Neurauter, Jr. whose telephone number is (571) 272-3918. The examiner can normally be reached on Monday through Friday from 9AM to 5:30PM Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gcn



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PRIMARY EXAMINER